

REMARKS

Applicants will address each of the Examiner's objections and rejections in the order in which they appear in the Office Action.

Claim Objections

The Examiner objects to Claims 2-3, 5-15, 17-27, 29-39 and 41-51 for informalities and is requesting that the "A" be changed to "The." Applicants have now done so and request that this objection be withdrawn.

Claim Rejections - 35 USC §103

Claims 1-4, 6-11, 13-16, 18-27, 40, 42-47 and 49-52

The Examiner also rejects Claims 1-4, 6-11, 13-16, 18-27, 40, 42-47 and 49-52 under 35 USC §103 as being unpatentable over Oikawa et al. in view of Prall et al. This rejection is respectfully traversed.

Independent Claims 1, 4, 16 and 52 of the present application are directed to a semiconductor device comprising a wiring, wherein the wiring includes at least one inert element, and 90% or more of the inert element is argon, and wherein an amount of sodium contained within the wiring is equal to or less than 0.3 ppm. Independent Claim 40 is directed to a semiconductor device wherein the film in the semiconductor device includes at least one inert element, and 90% or more of the inert element is argon, and wherein an amount of sodium contained within the wiring in the semiconductor device is equal to or less than 0.3 ppm. Applicants respectfully submit that these features are not disclosed or suggested by the cited references.

While the Examiner alleges that Oikawa discloses a wiring that includes at least one inert element, and 90% or more of the inert element is argon, no citation is provided in support thereof,

and Applicants can find no teaching or suggestion in Oikawa of such a concentration of argon. Instead, Oikawa merely states that argon is used during sputtering.

Further, while the Examiner alleges that Oikawa discloses that an amount of sodium contained within the wiring in the semiconductor device is equal to or less than 0.3 ppm, no citation is provided in support thereof, and Applicants can find no teaching or suggestion in Oikawa of such an amount of sodium (see e.g. Fig. 2 in Oikawa). As explained in the present application, when the amount of sodium within the wiring is equal to or less than 0.3 ppm, there is no harmful influence imparted to the TFT characteristics, even if the wiring is used as a gate wiring. See e.g. p. 10, lns. 6-10 of the present application.

Therefore, for at least the above-stated reasons, the rejected claims are patentable over the cited references. Accordingly, it is requested that this rejection be withdrawn.

Claims 5, 12, 17, 28-39, 41 and 48

The Examiner also rejects Claims 5, 12, 17, 28-39, 41 and 48 under 35 USC §103 as being unpatentable over Oikawa in view of Prall and further in view of Ikeda et al. This rejection is also respectfully traversed.

Claims 5 and 12 are dependent on Claim 4, Claim 17 is dependent on Claim 16, and Claims 41 and 48 are dependent on Claim 40. Accordingly, for the reasons discussed above for these independent claims, each of these dependent claims is also patentable over the cited references.

Independent Claim 28, and those claims dependent thereon, recite that the wiring comprises a phosphorus doped silicon. Applicants submit that Ikeda discloses a semiconductor film with n+ doped silicon (103a, 103b). Accordingly, the claims are patentable over these references.

Therefore, it is requested that this rejection also be withdrawn.

Conclusion


It is respectfully submitted that the present application is now in a condition for allowance and should be allowed.

If any fee should be due for this Amendment, please charge our deposit account 50/1039.

Favorable reconsideration is earnestly solicited.

Respectfully submitted,

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